WHAT IS CLAIMED IS:

1. An isolated polypeptide comprising the amino acid sequence of SEQ ID NO: 2, 4, 6, 8, or 10, and fragments thereof.

2. The isolated polypeptide of Claim 1, wherein the fragments comprise the amino acid residues 1 to 82 or 254 to 264 of SEQ ID NO: 2.

3. The isolated polypeptide of Claim 1, wherein the fragments comprise the amino acid residues 1 to 82, 118 to 146, or 283 to 292 of SEQ ID NO: 4.

4. The isolated polypeptide of Claim 1, wherein the fragments comprise the amino acid residues 36 to 64 or 201 to 211 of SEQ ID NO: 6.

5. The isolated polypeptide of Claim 1, wherein the fragments comprise the amino acid residues 1 to 82 or 118 to 146 of SEQ ID NO: 8.

6. The isolated polypeptide of Claim 1, wherein the fragments comprise the amino acid residues 36 to 64 of SEQ ID NO: 10.

7. An isolated nucleic acid encoding the polypeptide of any of Claims 1 to 6, and fragments thereof.

8. The isolated nucleic acid of Claim 7, which is the nucleotide sequence of SEQ ID NO: 1, 3, 5, 7, or 9.

9. The isolated nucleic acid of Claim 7, wherein the fragments comprise the nucleotides 1 to 115bp or 876 to 905bp of SEQ ID NO: 1.

10. The isolated nucleic acid of Claim 7, wherein the fragments comprise the nucleotides 1 to 115bp, 224 to 289bp, or 963 to 992bp of SEQ ID NO: 3.

11. The isolated nucleic acid of Claim 7, wherein the fragments comprise the nucleotides 1 to 115bp, 495 to 582bp, 561 to 648bp, or 1029 to 1058bp of SEQ ID NO: 5.

12. The isolated nucleic acid of Claim 7, wherein the fragments comprise the nucleotides 1 to 115bp, 495 to 582bp, 759 to 878bp, or 1083 to 1112bp of SEQ ID NO: 7.

13. The isolated nucleic acid of Claim 7, wherein the fragments comprise the nucleotides 1 to 115bp, 224 to 289bp, 561 to 648bp, 825 to 944bp, or 1149 to 1178bp of SEQ ID NO: 9.

14. An expression vector comprising the nucleic acid of any one of Claims 7 to 13.

15. A host cell comprising the expression vector of Claim 14.

16. A method for producing the polypeptide of any one of Claims 1 to 6, which comprises the steps of:

(1) culturing the host cell of Claim 15 under a condition suitable for the expression of the polypeptide; and

(2) recovering the polypeptide from the host cell culture.

17. An antibody specifically binding to the polypeptide of any one of Claims 1 to 6.

18. The antibody of Claim 17 is a polyclonal or monoclonal antibody.

19. A method for detecting the presence of the nucleic acid of any one of Claims 7 to 13 in a mammal, which comprises the steps of:

(1) extracting total RNA from a sample obtained from the mammal;

(2) amplifying the RNA by reverse transcriptase-polymerase chain reaction (RT-PCR) to obtain a cDNA sample;

(3) hybridizing the cDNA sample with the nucleic acid of any one of Claims 7 to 13; and

(4) detecting the amount of the hybridized sample.

20. The method of Claim 17, wherein the hybridizing process is conducted by Northern blot approach or microarray approach.

21. The method of Claim 19, which is useful in diagnosing non-small cell lung cancer.

22. The method of Claim 21, wherein the non-small cell lung cancer is large cell lung cancer.

23. A method for detecting the presence of the polypeptide of any one of Claims 1 to 6 in a mammal, which comprises the steps of contacting the antibody of Claim 17 or 18 with protein samples extracting from the mammal, and detecting the amount of antibody-antigen binding samples.

24. The method of Claim 23, wherein the antibody-antigen binding samples are detected by Western blot approach.

25. The method of Claim 23, which is useful in diagnosing non-small cell lung cancer.

26. The method of Claim 25, wherein the non-small cell lung cancer is large cell lung cancer.